



FILE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

August 12, 1998

Reply To
Attn Of: ORC-158

Larry Owen
McCulley Frick & Gilman
4900 Pearl East Circle, Suite 300W
Boulder, CO 80301

Dear Larry:

This letter and the attachments provide EPA's comments on the draft EE/CA (June 10, 1998) for CERCLA response actions associated with Union Pacific's proposed Rails-to-Trails conversion of the Wallace-Mullan Branch. The attachments reflect the comments of a number of EPA staff members. Although EPA management has been briefed and presented with this draft, the comments provided today do not reflect final management approval. We do expect, however, that EPA management approval will be completed during the "EPA regulatory review" scheduled before the draft EE/CA is made available for public comment.

As you will note, our comments are largely editorial. In preparing these comments, we have tried to be consistent with comments already submitted by DOJ and the Tribe, and, for your convenience, tried to eliminate redundancies between our comments and theirs. A summary of substantive comments is provided below.

The main area with added text is in section 3.2.3, Compliance with ARARs and Other Criteria. In addition to comments provided in the margins, we have also enclosed a Table 3-1, based on the table of ARARs from the 1992 ROD for Bunker Hill. By recognizing these ARARs, we do not anticipate any significant added effort or expenditure by Union Pacific. Rather, we believe that these ARARs and other criteria clarify the process for implementing the work that Union Pacific has tentatively agreed to undertake.

Our comments also reflect the need to consider alternatives to the Central Impoundment Area (CIA) for disposal of waste materials in the Basin, recognizing that design work continues for closing the CIA by September 1999. As we emphasized in the two recent meetings in Colorado, EPA is prepared to work with all parties to identify waste disposal alternatives that would be cost-effective for Union Pacific.

As you know, the June 10 draft EE/CA, particularly the Streamlined Risk Assessment, does not reflect additional work that has been discussed, such as more expansive removals in the Big Creek area. The Risk Assessment, in particular, does not reflect comments EPA has previously submitted. We assume these modifications will be reflected in the next draft.

A few specific comments related to the Risk Assessment:

1. "Bunker Hill Superfund Site" should be abbreviated consistently as the "BHSS" not "BHSF."
2. This work to resolve CERCLA liability is being done as a CERCLA removal, or, generically, response action. References to "remedial" action or "post-remedial" should be scrubbed unless referring to remedial actions inside the BHSS or future remedial actions post-ROD in the Basin.
3. Along with the fenced corridor through the Wallace Yard, there should be a plan for dust suppression to address threats from inhalation or ingestion of hazardous substances from contaminated areas on either side of the corridor.
4. (Risk Assessment, p. 7). Is there no environmental data on soils between Silverton and Osburn?

One issue that still needs significant attention is institutional controls. The promulgation of new local land use regulations may fall beyond the authority of the parties to this agreement. Moreover, the creation of a single entity to administer these regulations presently appears nebulous, particularly given the limited jurisdictions of the State, Tribe, and three counties. To some extent, details can be resolved through a side agreement among the government entities, and through the consent decree and Remedial Design Reports. But until such agreements are developed, the implementability of these elements of institutional controls remains suspect, and EPA will reserve its determination whether these elements provide adequate protection for human health and the environment.

If you have any problems reading or interpreting these comments, please give me or Earl a call. If any of these comments raise significant questions for the work to be performed, please let me know and we can discuss this on one of the regularly scheduled Tuesday calls.

Thank you for your efforts in pulling this all together. Based on the progress made so far, EPA looks forward to reaching an agreement-in-principle with Union Pacific in the near future and proceeding toward completion of a consent decree and construction of the trail.

Sincerely,


Clifford J. Villa

Attach: 1. Comments by Earl Liverman on draft EE/CA
 2. Comments on Clifford Villa copy of draft EE/CA
 3. Table 3-1, ARARs and Other Criteria
 4. 1996 Amendment to 1992 ROD for Bunker Hill

cc: Tom Greenland
 Tom Swegle
 Howard Funke
 Curt Fransen

3.2.3 Compliance with ARARs and Other Criteria

Section 300.415(i) of the National Contingency Plan (NCP), implementing the CERCLA statute, requires that removal actions conducted pursuant to CERCLA section 106 attain ARARs under Federal or State environmental laws or facility siting laws, to the extent practicable. Practicability may be determined in part by the scope of the proposed removal action.

The proposed removal actions contemplated in this EE/CA are limited to actions along the Wallace-Mullan Branch main line and related siding areas. Although these actions will reduce the potential for release of hazardous substances from the ROW, they are not intended to address ~~all~~ ^{discharge of...} contamination that may be in the lateral zones of the ROW that may be comprised of wetlands or surface waters. Accordingly, sections 301, ~~303~~ and other sections of the Clean Water Act, 33 U.S.C. § 1251 et seq., will not be considered to constitute ARARs for these actions. Although there will be some attendant benefits to capping certain areas of the ROW and, therefore, reducing hydraulic conductivity and infiltration of rainfall and snow melt, the proposed removal actions are not intended to address groundwater contamination. Therefore, the Safe Drinking Water Act, 42 U.S.C. § 300f et seq., will not be considered an ARAR for this action.

The applicability or relevance of RCRA, 42 U.S.C. § 9601 et seq., to this project is also limited. Certain wastes produced through the extraction and beneficiation of minerals have been excluded from RCRA regulation pursuant to RCRA section 3001(b)(3)(A)(ii). Such wastes, known as "Bevill exempt," may include mine tailings with elevated concentrations of lead, zinc, and cadmium along the ROW. Even if mine tailings of concern are not Bevill exempt, they may still be exempt from compliance with Land Disposal Restrictions (LDRs). Compliance with LDRs may be triggered when wastes are moved from one "area of contamination" (AOC) to another. Wastes left in place or consolidated within one AOC are not subject to LDRs. For purposes of CERCLA ^{this} response activities concerning mining wastes in the Coeur d'Alene River Basin, the removal and consolidation of mining wastes anywhere in the Basin may be considered action within the same AOC. As such, LDRs do not constitute applicable requirements for the removal and consolidation of mining wastes as contemplated in this EE/CA. Aside from response concerning mining wastes, LDRs may be applicable to any salvage or other response concerning rails, ties and other track materials. Compliance with these requirements for non-mining wastes will be assured through a salvage plan under development by the parties [attach draft].

Under the Clean Air Act, 42 U.S.C. § 7401 et seq., and the Idaho Air Pollution Act, §16.01 et seq., there may be, respectively, chemical-specific ARARs for emission of lead and particulates, and action-specific ARARs for control of fugitive dust during remediation. Additional ARARs and other crit are identified in Table 3-1.

A number of ~~the other~~ potential ARARs have already been identified as substantive requirements set out in the Interstate Commerce Commission (now Surface Transportation Board [STB]) Decision (November 28, 1994), regarding abandonment of the ROW. The Decision addresses salvage of the track structure, which is a necessary precursor to the remediation of the rail line ballast and adjacent portions of the ROW. The essence of these requirements are as follows:

- Railroad infrastructure, including rails and ties, shall not be salvaged until there has been consultation with the Idaho Department of Environmental Quality (IDEQ) and the EPA, to ensure that such salvage activities will be in compliance with CERCLA (42 U.S.C. 9601 et seq.), RCRA (42 U.S.C. 6901 et seq.), and other applicable laws and regulations.

Certain aspects of LDRs may also be considered relevant and appropriate for the management of Principal Threat Materials (PTM). PTM were defined in the 1992 ROD for the BHSS according to concentrations of designated metals in soils. For purposes of this EE/CA, the following concentrations will constitute PTM: lead, 84,600 ppm; cadmium, 71,000 ppm; arsenic, 15,000 ppm. Compliance with LDRs

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Table 10-1
Federal Chemical-Specific ARARs

Chemical-Specific	Citation	Prerequisite	Requirement	Location
I. Air				
A. Applicable Requirement				
1. Clean Air Act				
National Ambient Air Quality Standards (NAAQS)	42 U.S.C. Section 7401 et seq; 40 CFR Part 50	Establishes ambient air quality standards for emissions of chemicals and particulate matter.	<p>Emissions of particulates and chemicals which occur during remedial activities will meet the applicable NAAQS which are as follows.</p> <p>Particulate Matter: 150 $\mu\text{g}/\text{m}^3$ 24-hour average concentration, 50 $\mu\text{g}/\text{m}^3$ annual arithmetic mean.</p> <p>Lead: 1.5 $\mu\text{g Pb}/\text{m}^3$ (.5 $\mu\text{g Pb}/\text{m}^3$ is proposed)</p>	Site Wide
B. Relevant and Appropriate Requirement	None			
C. To Be Considered Materials	None			
II. Soil and Dust				
A. Applicable Requirements	None			
B. Relevant and Appropriate Requirement	None			

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Table 10-1
Federal Chemical-Specific ARARs

Chemical-Specific	Citation	Prerequisite	Requirement	Location
C. To Be Considered Materials				
1. Risk Assessment Data Evaluation Report (RADER) for the Non-populated Areas of the Bunker Hill Superfund Site	Technical Enforcement Contract Work Assignment C10002 Prepared by: Jacobs Engineering Group, Inc. and TerraGraphics, Inc.	Evaluates baseline health risk due to current site exposures and establishes contaminant levels in environmental media at the Site for the protection of public health.	The ARARs for soils may not provide adequate protection to human health; therefore a risk assessment approach using these guidances should be used in determining cleanup levels.	Site Wide
2. Soil/Dust Lead Contamination Advisory	Centers for Disease Control's statement on childhood blood lead levels, 1985.	Removal of contaminated soils.	Lead in soil/dust appears to be responsible for blood lead levels in children increasing above background levels when the concentrations in the soil/dust exceed 500-1,000 ppm. This concentration is based upon the established CDC blood lead level of 25 $\mu\text{g Pb/dl}$ in children. When soil/dust lead concentrations exceed 500-1,000 ppm, blood lead levels in children are found to exceed 25 $\mu\text{g Pb/dl}$.	Site Wide

Table 1
Federal Chemical-Specific ARARs

Chemical-Specific	Citation	Prerequisite	Requirement	Location
2. U.S. EPA Interim Guidance Concerning Soil Lead Cleanup Levels at Superfund Sites	Office of Solid Waste and Emergency Response (OSWER) Directive #9355.4-02, September 1989	Establishes an interim soil cleanup level for total lead in residential settings.	This guidance adopts the recommendation contained in the 1985 CDC statement on childhood lead poisoning (an interim soil cleanup level for residential settings of 500-1,000 ppm total lead), and is to be followed when the current or predicted land use of contaminated areas is residential.	Site Wide
3. U.S. EPA Strategy for Reducing Lead Exposures	Environmental Protection Agency October 31, 1990	Presents a strategy to reduce lead exposure, particularly to young children.	The strategy was developed to reduce lead exposures to the greatest extent possible. Goals of the strategy are to: 1) significantly reduce blood lead incidence above 10 $\mu\text{g Pb/dl}$ in children; and 2) reduce the amount of lead introduced into the environment.	Site Wide
4. Amendment to 1992 ROD For BHSS, Non-Populated Areas	Declaration of Chuck Clarke, Sept. 9, 1996	Presence of contaminants in soils in an concentration constituting principal threat materials	ROD Amendment allows containment instead of stabilization as remedy for PTM	Length of ROW

Table 10-1
Federal Chemical-Specific ARARs

Chemical-Specific	Citation	Prerequisite	Requirement	Location
6. Ground Water				
A. Applicable Requirement	None			
B. Relevant and Appropriate Requirement	Safe Drinking Water Act 40 CFR §141 <i>None</i>	MCLs, MCLGs, for arsenic, copper, lead, mercury, PCBs, selenium, silver, zinc, and nitrate	Maximum permissible level of contaminant which may be delivered to user of public water system	Site Wide
C. To Be Considered	None			
7. Surface Water				
A. Applicable Requirement	Clean Water Act - FWQC 40 CFR Part 131 <i>NONE</i>	Establishes acceptable use/designation levels for to protect ingestion of cold water aquatic biota and for intake by aquatic organisms in surface water	FWOC for antimony, arsenic, beryllium, cadmium, copper, lead, zinc, mercury, and PCBs	Onsite source contributions only and SECDR tributaries onsite
B. Relevant and Appropriate Requirement	<i>NONE</i>			
1. CWA-NPDES 40 CFR §440		Discharges to waters of U.S. must meet standards established under NPDES program.	Treatment of water to meet new permit requirements.	Onsite surface, water services, CIA, wetland system.
C. To Be Considered	None			
7. Debris/Buildings				

Table 10-1
Federal Chemical-Specific ARARs

Chemical-Specific	Citation	Prerequisite	Requirement	Location
A. Applicable Requirement	Toxic Substance Control Act 40 CFR §761, Subpart G	Establishes a PCB spill policy and regulates PCBs at concentrations of 50 ppm or greater, procedures for storage and disposal of PCBs, and PCB-containing materials.	PCB contaminated material must be managed and disposed of at TSCA facilities.	Smelter Complex and MOA Any PCBs on ROW?
	40 CFR §61	Establishes regulations governing management and disposal of asbestos.	Asbestos must be removed, managed, and disposed in accordance with specified standards.	Smelter Complex and MOA
B. Relevant and Appropriate Requirement	None			
C. To Be Considered	"A Guide on Remedial Actions at Superfund Sites with PCB Contamination" U.S. EPA Directive 9355.4-01 FS	Establishes guidelines for management and remediation of PCB/PCB contaminated material.		Smelter Complex and MOA

Table 10-2
Federal Location-Specific ARARs

Location-Specific	Citation	Prerequisite	Requirement	Location
Federal				
A. Applicable Requirement				
1. Historic project owned or controlled by a Federal Agency	National Historic Preservation Act; 16 U.S.C. 470 <i>et seq</i> ; 40 CFR 6.301(b); 36 CFR Part 800.	Property within areas of the Site is included in or eligible for the National Register of Historic Places.	The remedial action will be designed to minimize the effect on historic landmarks.	Site Wide
2. Site within an area where action may cause irreparable harm, loss, or destruction of artifacts.	Archeological and Historic Preservation Act; 16 U.S.C. 469; 40 CFR 6.301(c).	Property within area of the Site contains historical and archeological data.	The remedial action will be designed to minimize the effect on historical and archeological data.	Site Wide
3. Site located in area of critical habitat upon which endangered or threatened species depend.	Endangered Species Act of 1973; 16 U.S.C. 1531-1543; 50 CFR Parts 17, 401; 40 CFR 6.302(b). Federal Migratory Bird Act; 16 U.S.C. 703-712.	Determination of presence of endangered or threatened species.	The remedial action will be designed to conserve endangered or threatened species in their habitat, including consultation with the Department of Interior if such areas are affected.	Site Wide

Table 10-2
Federal Location-Specific ARARs

Location-Specific	Citation	Prerequisite	Requirement	Location
4. Site located within a floodplain	Protection of Floodplains, Executive Order 11988; 40 CFR 6, Appendix A.	Remedial action will take place within a 100-year floodplain.	The remedial action will be designed to avoid adversely impacting the floodplain wherever possible to ensure that the action's planning and budget reflects consideration of the flood hazards and floodplain management.	West Page Swamp, Smelterville Flats, and Wetlands System Length of ROW
5. Wetlands located in and around the site.	Protection of Wetlands; Executive Order 11990; 40 CFR 6, Appendix A.	Remedial actions may affect wetlands:	The remedial action will be designed to avoid adversely impacting wetlands wherever possible, including minimizing wetlands destruction and preserving wetland values.	West Page Swamp and Smelterville Flats Length of ROW
5a. Structures in waterways	Rivers Harbors Act 33 CFR §320-330	Placement of structures in waterways is restricted to pre-approval of Corps of Engineers	The remedial action will comply with these requirements.	Site Wide Length of ROW

Table 10-2
Federal Location-Specific ARARs

Location-Specific	Citation	Prerequisite	Requirement	Location
6. Waters in and around the Site.	Clean Water Act (Section 404)- Dredge or Fill Requirements; 33 U.S.C. 1251-1376; 40 CFR 230, 231	Capping, dike stabilization, construction of berms and levees, and disposal of contaminated soil, waste material or dredged material are examples of activities that may involve a discharge of dredged or fill material.	<p>The four conditions that must be satisfied before dredge and ^{or} fill is an allowable alternative are:</p> <ul style="list-style-type: none"> - There must be no practical alternative. - Discharge of dredged or fill material must not cause a violation of State water quality standards, violate any applicable toxic effluent standards, jeopardize threatened or endangered species, or injure a marine sanctuary. 	Site Wide

Table 10-2
Federal Location-Specific ARARs

Location-Specific	Citation	Prerequisite	Requirement	Location
6. Waters in and around the Site. (Continued)			<ul style="list-style-type: none"> - No discharge shall be permitted that will cause or contribute to significant degradation of the water. - Appropriate steps to minimize adverse effects must be taken. <p>Determine long- and short-term effects on physical, chemical, and biological components of the aquatic ecosystem.</p>	
7. Area containing fish and wildlife habitat.	<p>Fish and Wildlife Conservation Act of 1980; 16 U.S.C. 2901; 50 CFR Part 83.</p> <p>Fish and Wildlife Conservation Act, 16 U.S.C. §661 <u>et seq.</u></p> <p>Federal Migratory Bird Act, 16 U.S.C. 703</p>	Activity affecting wildlife and non-game fish.	Remedial action will conserve and promote conservation of non-game fish and wildlife and their habitats.	Site Wide

Table 10-2
Federal Location-Specific ARARs

Location-Specific	Citation	Prerequisite	Requirement	Location
B. Relevant and Appropriate Requirement	None			
1. 100-year floodplain.	Location Standard for Hazardous Waste Facilities - RCRA; 42 U.S.C. 6901; 40 CFR 264.18(b).	RCRA hazardous waste treatment and disposal.	Facility located in a 100-year floodplain must be designed, constructed, operated, and maintained to prevent washout during any 100-year/24 hour flood.	Site Wide
C. To Be Considered	None			
Central uplandment area (CIA)	Memorandum from Michael F. Gearheard, December 7, 1997	Disposal of waste in CIA	Disposal must meet technical and non-technical critical set out in memo, and be coordinated with affected communities.	CIA, surrounding communities

Table 10-3
Federal Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
A. Applicable Requirement				
1. Disposal of Solid Waste	RCRA 42 U.S.C. §6901 et seq; 40 CFR 257	Maintenance of a facility at which solid wastes are disposed of.	<ul style="list-style-type: none"> - Facility or practices in floodplains will not restrict flow of basic flood, reduce the temporary water storage capacity of the floodplain or otherwise result in a wash-out of solid waste. - Facility or practices shall not cause or contribute to taking of any endangered or threatened species. - Facility or practices shall not result in the destruction or abuse of critical habitat. 	CIA, Page Pond, and solid waste landfills <i>other</i> <i>waste</i> <i>repositories</i>

Table 10-3
Federal Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
1. Disposal of Solid Waste (Continued)			<ul style="list-style-type: none"> - Facility or practices shall not cause discharge of pollutants into waters of the U.S. in violation of a NPDES permit. - Facility or practices shall not cause discharge of dredged or fill material into waters of the U.S. - Facility or practices shall not contaminate underground drinking source beyond facilities boundary. 	CIA, Page Pond, and solid waste landfills <i>other repositories</i>

Table 10-3
Federal Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
1. Disposal of Solid Waste (Continued)			<ul style="list-style-type: none"> - The concentration of explosive gases generated at the facility shall not exceed: (1) 25% of the lower explosive limit for the gases in facility structures; (2) the lower explosive limit for the gases at the boundary. - Facility or practices shall not pose a hazard to the safety of persons or property from fire. - Facility or practices shall not allow uncontrolled public access so as to expose the public to potential health and safety hazards. 	CIA, Page Pond, and solid waste landfills

Table 10-3
Federal Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
Relevant and Appropriate Requirement				
1. Removal of contaminated soils	Surface Mining Control and Reclamation Act of 1977; 25 U.S.C. §§1201 <u>et seq</u> ; 30 CFR Parts 816.11, .95, .97, .100, .102, .107, .111, .113, .114, .116	Removal of contaminated soils.	<p>11-Posting signs and markers for reclamation, including top soil markers and perimeter markers.</p> <p>95-Stabilization of all exposed surface areas to effectively control erosion pollution attendant to erosion.</p> <p>97-Use of best technology currently available to minimize disturbance, adverse impacts on fish, wildlife, related environmental values and enhancement of such if possible; no activity which would jeopardize continued existence of endangered or likely destroy or adversely effect critical habitat; avoid habitat disturbance & enhance where practicable, restore, replace, wetlands, riparian vegetation habitats for fish and wildlife.</p>	Site Wide

Table 10-3
Federal Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
1. Removal of contaminated soils (Continued)			<p>100-Contemporaneous reclamation including, but not limited to back regrading, topsoil replacements at revegetation. Achieve approximate original contours, eliminate all high spoil piles, and depressions.</p> <p>102-Achieve a post action slope not exceeding angle of repose or such slope as is necessary to achieve a long-term static safety factor of 1.0 to prevent slides.</p>	Site Wide

Table 10-3
Federal Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
2. Threshold Limit Values (TLVs)	Established by American Conference of Governmental Industrial Hygienists (ACGIH)	Releases of airborne contaminants during remedial activities.	<p>TLVs are based on the time weighted average (TWA) exposure to an airborne contaminant over an 8-hour work day or a 40-hour work week. Identify levels of airborne contaminants with which health risks may be associated. Since there are no ARARs for several of the contaminants of concern- arsenic, antimony, copper, cadmium, mercury, zinc-the TLVs should be considered ARARs for airborne emission of such chemical TLVs for the contaminants of concern as follows:</p> <p>Antimony 500 $\mu\text{g}/\text{m}^3$ Arsenic 200 $\mu\text{g}/\text{m}^3$ Cadmium 50 $\mu\text{g}/\text{m}^3$ Copper fume = 200 $\mu\text{g}/\text{m}^3$ dust = 1,000 $\mu\text{g}/\text{m}^3$</p>	Site Wide

Table 10-3
Federal Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
2. Threshold Limit Values (TLVs) (Continued)			<p>Lead 150 $\mu\text{g}/\text{m}^3$</p> <p>Mercury alkyl=10 $\mu\text{g}/\text{m}^3$ Except Alkyl: vapor=50 $\mu\text{g}/\text{m}^3$ inorganic=100 $\mu\text{g}/\text{m}^3$</p> <p>Zinc ZnCl=1,000 $\mu\text{g}/\text{m}^3$ Zinc Oxide: fume=5,000 $\mu\text{g}/\text{m}^3$ dust=10,000 $\mu\text{g}/\text{m}^3$</p>	Site Wide
3. Treatment, Storage, or Disposal of Hazardous Waste	40 CFR 264.13, .14	The treatment, storage, or disposal of RCRA regulated wastes.	<p>Prevent unknowing entry and minimize the possibility of unauthorized entry of persons or livestock to the active portion of the facility. Includes:</p> <ul style="list-style-type: none"> - artificial or natural barrier completely surrounding the active area - a means to control entry - a sign stating 'Danger, Unauthorized Personnel Keep Out' 	<p>CIA, Page Pond, MOA, and Smehterville Flats.</p> <p>other waste repositories</p>

Table 10-3
Federal Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
4. Closure Requirements	RCRA/HWMA 40 CFR §264, Subpart G	Closure of hazardous waste repositories must meet protective standards.	Regulations to minimize contaminant migration, provide leachate collection and prevent contaminant exposure will be met.	Smelter Complex
5. Landfill Design and Construction	RCRA/HWMA 40 CFR §264, Subpart N	Hazardous waste landfills must meet minimum design standards.	Protectiveness will be achieved through capping and institutional controls.	Smelter Complex
6. Ground Water Monitoring	RCRA/HWMA 40 CFR §264, Subpart F	Establishes standards for detection and compliance monitoring.	Site wide monitoring will accommodate specific ground water monitoring requirements.	Smelter Complex
	40 CFR §264, Subpart X			Wetlands System
7. Land Disposal Restrictions (LDRs)	RCRA/HWMA 40 CFR §268	LDRs place specific restrictions (conc or trtmt) on RCRA hazardous wastes prior to their placement in a land disposal unit.	Relevant and appropriate LDR requirements will be met if any material accumulations are treated ex situ. <i>disposed</i>	MOA and Smelter Complex

**Table 10-3
Federal Action-Specific ARARs**

Action-Specific	Citation	Prerequisite	Requirement	Location
8. Closure requirements	RCRA/HWMA 40 CFR §264, Subpart G	Closure of hazardous waste repositories must meet protective standards.	Protectiveness will be achieved through capping and institutional controls.	CIA, Page Pond
9. Ground Water Monitoring	RCRA/HWMA 40 CFR §264, Subpart F	Establishes standards for detection and compliance monitoring.	Site wide monitoring will accommodate specific ground water monitoring requirements.	Smelterville Flats, Page Pond, CIA, MOA, and Hillside
10. NPDES Storm Water Discharge	40 CFR Part 122.26	Establishes permitting process and discharge regulations for storm water.	Relevant and appropriate for alternatives where mine material comes into contact with storm water or snowmelt.	Site Wide
C. To Be Considered Materials				

Table 10-3
Federal Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
1. Estimated Limit Values (ELVs)	Established by American Conference of Governmental Industrial Hygienists (ACGIH).	Releases of airborne contaminants during remedial activities.	<p>ELVs are based on Threshold Limit Values (TLVs) and converted to reflect exposure to contaminants on a 24-hour/day basis. The calculation of an ELV does not take into consideration the additive and synergistic effects of contaminants and additional exposures from media other than air. ELVs are not expected to be completely protective of the potential effects of exposures to contaminants; however, they do provide some indication of airborne contaminant levels at which adverse health effects could occur. Since there are no ARARs for several of the contaminants of concern arsenic, antimony, copper, cadmium, mercury, and zinc the ELVs should be considered TBC for remedial activities which will cause airborne emission of such chemicals. The ELVs for the contaminants of</p>	

Table 10-3
Federal Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
1. Estimated Limit Values (ELVs) (Continued)			 Mercury alkyl = $0.2 \mu\text{g}/\text{m}^3$ Except alkyl: vapor = $1.0 \mu\text{g}/\text{m}^3$ inorganic = $2.0 \mu\text{g}/\text{m}^3$ Zinc ZnCl = $20.0 \mu\text{g}/\text{m}^3$ Zinc Oxide: fume = $120 \mu\text{g}/\text{m}^3$ dust = $200 \mu\text{g}/\text{m}^3$ 	

**Table 10-4
State of Idaho Chemical-Specific ARARs**

Chemical-Specific	Citation	Prerequisite	Requirement	Location
Air				
A. Applicable Requirement				
1. Toxic Substances	IDAPA §16.01.1011, 01	Emission of air contaminants that are toxic to human health, animal life, or vegetation.	Emissions of air contaminants which occur during remedial activities will not be in such quantities or concentrations with other contaminants, injure or unreasonably affect human health, animal life or vegetation.	Site Wide
B. Relevant and appropriate	None			
C. To Be Considered	None			
Soil	None			

Table 10-5
State of Idaho Location-Specific ARARs

Location-Specific	Citation	Prerequisite	Requirement	Location
I. Air				
II. Soil				
A. Applicable Requirement				
1. Areas Adjacent to or in the Vicinity of State Waters	IDAPA §16.01.2800	Storage or disposal of hazardous or deleterious materials in the vicinity of, or adjacent to, state waters.	The remedial action will be designed with adequate measures and controls to ensure stored or disposed contaminated soils will not enter state waters as a result of high water, precipitation, runoff, wind, facility failure, accidents or third-party activities.	
2. Preservation of Historic Sites	I.C. § 67-4601 to 4619	Property within areas of the Site is included in the National Register of Historic places	The remedial action will be designed to minimize the effect on historic landmarks.	Site wide

Table 10-5
State of Idaho Location-Specific ARARs

Location-Specific	Citation	Prerequisite	Requirement	Location
B. Relevant and Appropriate				
1. Siting of Hazardous Waste Disposal Facility	I.C. §§39-5801 <u>et seq.</u>	Siting of a hazardous waste disposal facility.	The remedial action will be designed to satisfy some of the technical criteria in the Idaho Hazardous Waste Siting Management Plan as adopted by the Idaho Legislature. Consideration will be given in remedy design to general considerations referenced by the Hazardous Waste Facility Siting Act. However, a siting license for an onsite hazardous waste disposal facility is not required.	
2. Endangered Species	I.C. § 36-201	Determination of presence of endangered or threatened species.	Remediation will be designed to conserve endangered or threatened species, and their habitat.	Site wide

Table 10-6
State of Idaho Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
I. Air				
A. Applicable Requirement				
1. Fugitive Dust	IDAPA §16.01.1251-16.01.1252	Emission of airborne particulate matter.	The remedial action will be designed to take all reasonable precautions to prevent particulate matter from becoming airborne including but not limited to, as appropriate, the use of water or chemicals as dust suppressants, the covering of trucks and the prompt removal and handling of excavated materials.	
II. Soil				
A. Applicable Requirement				
1. Management of Solid Waste	IDAPA §§16.01.5000 et seq.	Management of solid waste including storage, collection, transfer, transport, processing, separation, treatment and disposal.	The remedial action will be designed to manage solid waste to prevent health hazards, public nuisances and pollution to the environment in accordance with the applicable solid waste management requirements. No permit is required for onsite actions.	

**Table 10-6
State of Idaho Action-Specific ARARs**

Action-Specific	Citation	Prerequisite	Requirement	Location
2. Activities Generating Non- point Discharges to Surface Waters	IDAPA §§16.01.2050, 06 and 16.01.2300,04	Construction and other activities which may lead to non-point source discharges to surface waters.	The remedial action will be designed to utilize best management practices or knowledgeable and reasonable efforts in construction activities to minimize adverse water quality impacts and provide full protection or maintenance of beneficial uses of surface waters.	
B. Relevant and Appropriate				

Table 10-6
State of Idaho Action-Specific ARARs

Action-Specific	Citation	Prerequisite	Requirement	Location
1. Management of Hazardous Waste	I.C. §§39-4401 et seq., IDAPA §§16.01.5000 et seq.	Generation, transportation, storage or disposal of hazardous waste.	The remedial action will be designed to manage any hazardous waste that may be generated by the remedial action in accordance with the relevant and appropriate generation, transportation, storage and disposal requirements for such waste. Onsite actions are exempt from some requirements, and permits are not required for onsite activities.	
2. Land Disposal Restrictions	IDAPA § 16.01.5011	LDRs place specific restrictions (conc or trtmt) on RCRA hazardous wastes prior to their placement in a land disposal unit.	Relevant and appropriate LDR requirements will be met if any material accumulations are treated <u>ex situ</u> .	
C. To Be Considered	None			